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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------------|------------------|
| 10/038,805 | 12/31/2001 | Robert L. Popp | KCC 4773 (K.C. No. 17,181) | 2929 |
| 321 | 7590 | 12/23/2004 | EXAMINER | |
| SENNIGER POWERS LEAVITT AND ROEDEL ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102 | | | BOGART, MICHAEL G | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3761 | |

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,805

Applicant(s)

POPP ET AL.

Examiner

Michael G. Bogart

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3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8, 10-18 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) 14, 15, 17, 18, 20, 21 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8, 10-13, 16, 22, 23 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>02 December 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 103 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 2-8, 10-13, 16, 22, 23 and 25-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Allen *et al.* (US 5,547,531 A).

Regarding claims 27-29, Allen *et al.* teach a garment (50) for personal wear, comprising:

a body (51) having first and second end regions (56, 58);

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a mechanical fastening system (72) disposed on the body (51), the

mechanical fastening system (72) comprising:

a multi-directional stretchable loop fastening component (22, 72b) disposed in the first end region (56) of the body (51), said loop fastening component (22, 72b) comprising a nonwoven loop material (30) secured to an elastomeric substrate (34), said loop fastening component (22, 72b) being extensible during use in first and second substantially perpendicular directions generally within the plane of said loop fastening component (22, 72b) and being elastomeric during use in at least one of said first and second directions, and

a hook fastening component (72a) disposed in the second end region (58) of the garment body (51) and comprising a hook material (24, 28) adapted to refastenably engage the multi-directional stretchable loop fastening component (22, 72b)(figure 7, below)(column 17, lines 13-27).

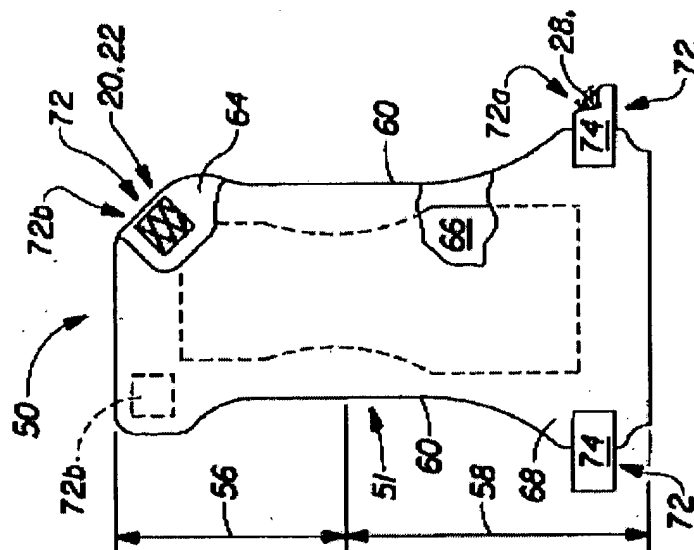


Fig. 7

Regarding the limitation that the loop fastening component (22, 72b) is extensible in use in first and second perpendicular directions and elastomeric in at least one of these

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directions, Allen *et al.* teach that the combined laminate (22) of elastic (34) and loop material (30) is elastically extensible in at least the machine and cross-machine directions which are within the plane of the material and which are perpendicular to each other (column 17, lines 13-27).

Allen *et al.* expressly disclose every limitation of the claimed invention except for the specific shear or peel strength values required to separate the fastened hook and loop components.

Generally, differences in test characteristics will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such test characteristic is critical. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

Regarding claims 5-7, 10-12, 22, 23 and 27-29, the benefits of optimizing the sheer strength of the fastened hook and loop components would have been known prior to applying a test, making these values result-effective variables. One of ordinary skill in the art would have recognized the benefit of modifying the sheer or peel strength of these interlocked components in order to achieve the optimal balance of making the fastener sufficiently strong to resist shearing or peeling during use, but not too strong for the intended user of the device to unfasten as needed.

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Regarding claims 28 and 29, Allen *et al.* teach a liquid pervious inner layer (64), an opposed outer layer (68), and an absorbent layer (66) therebetween (figure 7).

Regarding claim 2, Allen *et al.* teach that the stretchable loop fastening component (22) is elastomeric in use in both the first and second directions (column 17, lines 13-27).

Regarding claim 3, Allen *et al.* teach multi-directional stretchable loop fastening component (22) comprising a nonwoven web (30) stretch bonded to an elastomeric film (34)(column 5, line 58-col. 6, line 50).

Regarding claim 4, Allen *et al.* teach a multi-directional stretchable loop fastening component (22) comprising a mechanically prestrained composite (column 5, line 47-column 6, line 50).

Regarding claim 8, Allen *et al.* teach a hook fastening component (22) that is stretchable (column 17, lines 13-27).

Regarding claim 13, Allen *et al.* teaches a loop fastening component (22) which is a stretched elastic laminate (30, 34)(column 17, lines 13-27).

Claim 13 teaches the claimed structure of the instant invention but not the specific process by which it was made. Product by process claims are not limited to the manipulations of the recited steps, only to the structure implied by the steps. "We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product by process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then

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obtain prior art products and make physical comparisons therewith.” *In re Brown*, 173 USPQ 685, 688 (CCPA 1972).

Because claim 13 recites no structural differences from the disclosure of Allen et al., it is not patentably distinguished from the reference.

Regarding claims 16 and 25, Allen *et al.* teach that the loop fastening component (72b) comprises side panels of the body (51)(see figure 7, above).

Regarding claim 26, Allen *et al.* teach a hook fastening component (e.g., polypropylene) that is inherently stretchable to same degree (column 11, line 47-column 12, line 15).

Response to Arguments

Applicant's arguments with respect to claims 2-8, 10-13, 16, 22, 23 and 25-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.

In the event the examiner is not available, the examiner's supervisor, Larry Schwartz may be reached at phone number (571) 272-4390. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-4933.

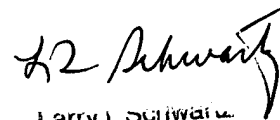
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Bogart
14 December 2004



Larry I. Schwartz
Supervisory Patent Examiner
Group 3700